#### WHAT IS CLAIMED IS:

1. A method for recovering a basic input/output system (BIOS) memory circuit in a computer system, comprising steps of:

providing a memory device comprising a first basic input/output system memory circuit and a second basic input/output system memory circuit, said first basic input/output system memory circuit and said second basic input/output system memory circuit respectively having a first computer program and a second computer program stored therein, wherein said first basic input/output system memory circuit and said second basic input/output system memory circuit are employed to initiate an operation of said computer system;

enabling said second basic input/output system memory circuit upon booting said computer system;

detecting if said first computer program includes an error; and

re-programming said first basic input/output system memory circuit based on said second computer program when said error is detected in said first computer program.

- 2. A method according to claim 1 wherein said first computer program and said second computer program are identical.
- 3. A method according to claim 1 wherein said first computer program and said second computer program are different.
- 4. A method according to claim 1 wherein said enabling step further comprises steps of:

providing a chip enabling circuit having a chip enabling control terminal; and

enabling said second BIOS memory circuit through said chip enabling

control terminal of said chip enabling circuit upon booting said computer system.

- 5. A method according to claim 4 wherein said chip enabling control terminal is a general purpose input/output pin (GPIO pin).
- 6. A method according to claim 1 wherein said detecting step further comprises steps of:

providing an error-detecting circuit; and

checking an error-detecting data value contained in said first computer program through said error-detecting circuit for determining if said first computer program includes said error.

- 7. A method according to claim 6 wherein said error-detecting data value is a checksum data value.
- 8. A method according to claim 6 wherein said error-detecting data value is a parity check data value.
- 9. A method according to claim 6 wherein said error-detecting data value is a cyclic redundancy check (CRC) data value.
- 10. A method according to claim 1 wherein said first basic input/output system memory circuit further comprises a flash utility for reprogramming said first basic input/output system memory circuit based on said second computer program.
- 11. A method according to claim 1 wherein said second basic input/output / system memory circuit further comprises a flash utility for reprogramming said first basic input/output system memory circuit based on said second computer program.
  - 12. A method for initiating a computer system, comprising steps of:

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providing a memory chip comprising a first basic input/output system memory circuit and a second basic input/output system memory circuit, said first basic input/output system memory circuit and said second basic input/output system memory circuit respectively having a first computer program and a second computer program stored therein, wherein said first basic input/output system memory circuit and said second basic input/output system memory circuit are employed to initiate an operation of said computer system;

enabling said second basic input/output system memory circuit upon booting said computer system;

detecting if said first computer program includes an error;

re-programming said first basic input/output system memory circuit based on said second computer program when said error is detected in said first computer program;

enabling said first basic input/output system memory circuit and disabling said second basic input/output system memory circuit; and

initiating an operation of said computer system through said first basic input/output system memory circuit.

- 13. A method according to claim 12 wherein said first computer program and said second computer program are identical.
- 14. A method according to claim 12 wherein said first computer program and said second computer program are different.
- 15. A method according to claim 12 wherein said step of enabling said second BIOS memory circuit further comprises steps of:

providing a chip enabling circuit having a chip enabling control terminal; and

enabling said second BIOS memory circuit through said chip enabling control terminal of said chip enabling circuit upon booting said computer system.

- 16. A method according to claim 15 wherein said chip enabling control terminal is a general purpose input/output pin (GPIO pin).
- 17. A method according to claim 12 wherein said detecting step further comprises steps of:

providing an error-detecting circuit; and

checking an error-detecting data value contained in said first computer program through said error-detecting circuit for determining if said first computer program includes said error.

- 18. A method according to claim 17 wherein said error-detecting data value is a checksum data value.
- 19. A method according to claim 17 wherein said error-detecting data value is a parity check data value.
- 20. A method according to claim 17 wherein said error-detecting data value is a cyclic redundancy check (CRC) data value.
- 21. A method according to claim 12 wherein said first basic input/output system memory circuit further comprises a flash utility for reprogramming said first basic input/output system memory circuit based on said second computer program.
- 22. A method according to claim 12 wherein said second basic input/output system memory circuit further comprises a flash utility for reprogramming said first basic input/output system memory circuit based on said second computer program.